

CLAIM LISTING SHOWING CLAIM AMENDMENTS

1. (Original) A locking device, comprising:
 - (A) a shackle member including
 - (1) an elongated shank portion,
 - (2) a stop portion at a first end of said shank portion, and
 - (3) a latch portion at a second end of said shank portion, said shank portion having an outer surface margin adjacent to said latch portion;
 - (B) a locking head including a locking mechanism disposed therein and having an entryway sized and adapted to mate with said latch portion, said locking mechanism being movable between
 - (1) a locked state to lockably retain said latch portion in said locking head when said latch portion is in an engaged state and
 - (2) an unlocked state to release said latch portion therefrom; and
 - (C) a head cover including
 - (1) a cover portion operative to engage said locking head,
 - (2) a flange portion extending inwardly from said cover portion to define an opening having a surrounding flange edge, the opening being sized such that said latch portion may be inserted into and removed from said locking head through the opening, and
 - (3) a seal structure associated with the edge of said flange, said seal structure operative when said latch portion is in the engaged state to sealably engage the outer surface margin of said shank portion.
2. (Original) A locking device according to claim 1 wherein said locking mechanism is key operable, said locking head having a face opposite the entryway with a keyway adapted to receive a key for said locking mechanism.

3. (Original) A locking device according to claim 2 wherein said head cover includes a cap member supported thereon, said cap member movable between an open position permitting access to the keyway and a closed position wherein said cap member prohibits access to the keyway.

4. (Previously Presented) A locking device according to claim 3 wherein said cap member is formed integrally with said cover portion.

5. (Original) A locking device according to claim 1 wherein said locking head is formed either as a cylinder or a frustum with a surrounding outer head surface.

6. (Original) A locking device according to claim 5 wherein said cover portion is formed as a skirt extending around the outer head surface.

7. (Original) A locking device according to claim 1 wherein said head cover substantially encases said locking head.

8. (Original) A locking device according to claim 1 wherein said head cover is formed of a stiff yet resilient material, said seal structure being defined by an edge margin of said flange.

9. (Original) A locking device according to claim 8 wherein said edge margin has a truncated profile.

10. (Original) A locking device according to claim 1 wherein the edge of said flange has a groove formed therein, said seal structure being defined by a resilient seal member disposed in the groove.

11. (Original) A locking device according to claim 10 wherein said seal member is a resilient O-ring.

12. (Original) A locking device according to claim 1 wherein said shank is an elongated linear member and extends along a central longitudinal axis.

13. (Original) A locking device according to claim 12 wherein said shank has a cylindrical configuration.

14. (Currently Amended) A locking device according to claim 12 wherein said locking head and said stop ~~member~~portion are aligned with said shank along said longitudinal axis.

15. (Original) A locking device according to claim 1 wherein said stop portion is formed either as a cylinder or a frustum.

16. (Original) A locking device according to claim 1 including a stop portion cover that substantially encases said stop portion.

17. (Original) A locking device according to claim 16 wherein said stop portion cover is formed of a stiff yet resilient material.

18. (Previously Presented) A locking hitch pin adapted to secure at least two members together, comprising:

(A) a shackle member including

(1) an elongated cylindrical shank portion,

(2) a stop portion located at a first end of said shank portion and formed as either a cylinder or a frustum and oriented coaxially with said shank portion so as to have a peripheral stop portion surface, a transversely oriented inner stop face adjacent to said shank portion and a transversely oriented outer stop face opposite said inner stop face, and

(3) a latch portion at a second end of said shank portion, said shank portion having an outer surface margin adjacent to said latch portion;

(B) a locking head formed either as a cylinder or a frustum adapted to engage said shank to define an engaged state, said locking head having a peripheral head surface, a transversely oriented inner head face adjacent to said shank portion

with an entryway sized and adapted to mate with said latch portion such that said locking head is coaxial with said shank when in the engaged state and a transversely oriented outer head face opposite said inner head face, said locking head including a locking mechanism disposed therein that is movable between

- (1) a locked state to lockably retain said latch portion in said locking head when said latch portion is in the engaged state with said locking head and

- (2) an unlocked state to release said latch portion from said locking mechanism; and

- (C) a head cover including

- (1) a skirt operative to extend around at least some of the peripheral head surface so as to engage said locking head,

- (2) a first flange extending inwardly from said skirt portion alongside the inner head face and having an opening forming a surrounding flange edge, the opening being sized such that said latch portion may be inserted into and removed from said locking head through the opening, and

- (3) a seal structure associated with the edge of said first flange, said seal structure operative when said latch portion is in the engaged state to seal against the outer surface margin of said shank portion.

19. (Original) A locking hitch pin according to claim 18 wherein said locking mechanism is key operable, said outer head face provided with a keyway adapted to receive a key for said locking mechanism.

20. (Original) A locking hitch pin according to claim 19 wherein said head cover includes a cap member supported thereon, said cap member movable between an open position permitting access to the keyway and a closed position

wherein said cap member engages said locking head to prohibit access to the keyway.

21. (Original) A locking hitch pin according to claim 18 wherein said head cover substantially encases said locking head.

22. (Previously Presented) A locking hitch pin according to claim 18 wherein said head cover is formed of a stiff yet resilient material, said seal structure being defined by an edge margin of said first flange.

23. (Original) A locking hitch pin according to claim 22 wherein said edge margin has a truncated profile.

24. (Original) A locking hitch pin according to claim 18 wherein the edge of said flange has a groove formed therein, said seal structure being defined by a resilient seal member disposed in the groove.

25. (Original) A locking hitch pin according to claim 24 wherein said seal member is a resilient O-ring.

26. (Original) A locking hitch pin according to claim 18 including a stop portion cover having a skirt operative to extend around at least some of the peripheral stop portion surface so as to engage said stop portion.

27. (Previously Presented) A locking hitch pin according to claim 26 wherein said stop portion cover has a second flange extending radially inwardly from said skirt alongside the inner stop face.

28. (Original) A locking hitch pin according to claim 27 wherein said stop portion cover substantially encases said stop portion.

29. (Original) A locking device according to claim 28 wherein said stop portion cover and said head cover are formed of a stiff yet resilient material such that

said first and second flanges form bumpers, respectively for said locking head and said stop portion relative to the two members to be secured together thereby.

30. (Original) In a hitch adapted to interconnect a trailer vehicle to a towing vehicle including a hitch bar having a passageway therethrough and a hitch receiver having opposed holes, said hitch bar and said hitch receiver operative to telescopically mate together as a mated pair with the passageway aligned with the holes to define a transverse dimension for said mated pair, the improvement comprising a hitch pin assembly including a shackle member that has an elongated shank portion with a stop portion at a first end thereof and a latch portion at a second end thereof, said shank portion having an outer surface adjacent to said latch portion, said hitch pin assembly further including a locking head that has a locking mechanism disposed therein and that has an entryway sized and adapted to mate with said latch portion with the locking mechanism being movable between a locked state to lockably retain said latch portion therein when said latch portion is in an engaged state with said locking head and an unlocked state to release said latch portion therefrom, said hitch pin assembly further including a head cover that has a first cover portion operative to engage said locking head, a flange portion extending inwardly from said cover portion to define an opening having a surrounding flange edge with the opening being sized such that said latch portion may be inserted and removed from said locking head through the opening, and a seal structure associated with the edge of said flange, said seal structure operative when said latch portion is in the engaged state to sealably engage the outer surface of said shank portion.

31. (Original) The improvement according to claim 30 wherein said head cover substantially encases said locking head.

32. (Original) The improvement according to claim 30 wherein said head cover is formed of a stiff yet resilient material, said seal structure being defined by an edge margin of said flange.

33. (Original) The improvement according to claim 30 wherein the edge of said flange has a groove formed therein, said seal structure being defined by a resilient seal member disposed in the groove.

34. (Original) The improvement according to claim 30 including a stop portion cover that substantially encases said stop portion.

35. (Previously Presented) The improvement according to claim 34 wherein said stop portion cover is formed of a stiff yet resilient material.

36. (New) A locking hitch pin adapted to secure at least two members together, comprising:

(A) a shackle member including

(1) an elongated cylindrical shank portion,

(2) a stop portion located at a first end of said shank portion and formed as either a cylinder or a frustum and oriented coaxially with said shank portion so as to have a peripheral stop portion surface, a transversely oriented inner stop face adjacent to said shank portion and a transversely oriented outer stop face opposite said inner stop face, and

(3) a latch portion at a second end of said shank portion, said shank portion having an outer surface margin adjacent to said latch portion;

(B) a locking head formed either as a cylinder or a frustum adapted to engage said shank to define an engaged state, said locking head having a peripheral head surface, a transversely oriented inner head face adjacent to said shank portion with an entryway sized and adapted to mate with said latch portion such that said

locking head is coaxial with said shank when in the engaged state and a transversely oriented outer head face opposite said inner head face, said locking head including a locking mechanism disposed therein that is movable between

- (1) a locked state to lockably retain said latch portion in said locking head when said latch portion is in the engaged state with said locking head and

- (2) an unlocked state to release said latch portion from said locking mechanism; and

- (C) a head cover including

- (1) a skirt operative to extend around and mechanically engage at least some of the peripheral head surface so as to engage said locking head,

- (2) a first flange extending inwardly from said skirt portion alongside and in confronting relationship with the inner head face and having an opening forming a surrounding flange edge, the opening being sized such that said latch portion may be inserted into and removed from said locking head through the opening, and

- (3) a seal structure associated with the edge of said first flange, said seal structure operative when said latch portion is in the engaged state to seal against the outer surface margin of said shank portion.